

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

March 21, 2011

Stephen J. Silva, P.E., Chief
Water Quality Branch
United States Environmental Protection Agency
Region I
5 Post Office Square, Suite 100
Boston, MA 02114-3912

Re: MADEP Extensions of Variances for CSO Discharges by MWRA and Cities of Somerville and Cambridge to Alewife Brook/Upper Mystic River and for CSO discharges by MWRA, City of Cambridge and Boston Water & Sewer Commission to Lower Charles River/Charles Basin

Dear Mr. Silva:

Enclosed are the Department of Environmental Protection's (MADEP) Final Determinations to Extend Variances for CSO Discharges by the Massachusetts Water Resources Authority (MWRA) and Cities of Somerville and Cambridge to Alewife Brook/Upper Mystic River and for CSO discharges by MWRA, the City of Cambridge and Boston Water & Sewer Commission to the Lower Charles River/Charles Basin (Variance Extensions). MADEP issued these Variance Extensions pursuant to the Massachusetts Surface Water Quality Standards, 314 CMR 4.00. Additionally, enclosed are copies of the Fact Sheets in connection with the Variance Extensions, along with a copy of our Response to Public Comments on the Tentative Determinations.

With respect to the MWRA, on March 14, 2006, EPA approved variances MADEP submitted to EPA, on March 13, 2006, for the MWRA's CSO discharges to the Lower Charles River Basin and to Alewife Brook/Upper Mystic River. EPA's action approved triennial re-issuance of the variances, through the year 2020, subject to conditions specified in EPA's March 14, 2006 letter. Having reviewed the available relevant information, MADEP has determined that the conditions established for re-issuance of the variances for the MWRA have been met. MADEP would appreciate EPA's confirmation that the Variance Extensions are approved for the MWRA in accordance with EPA's March 14, 2006 approval letter. Further, MADEP also seeks EPA approval of: 1) the Lower Charles River/Charles Basin Variance Extension for the City of Cambridge and the Boston Water and Sewer Commission; and 2) the Alewife Brook/Upper

Mystic River Variance Extension for the City of Cambridge and the City of Somerville.

MADEP published public notice of its Tentative Determination to issue both Variance Extensions in *The Boston Globe* of June 20, 2010 and in *The Environmental Monitor* of June 18, 2010. A public hearing was held at MADEP'S Boston office on July 21, 2010. Following public comment and review, on August 26, 2010, MADEP issued the Variance Extensions.

The Variance Extension for CSO Discharges to Alewife Brook/Upper Mystic River became effective on September 1, 2010, and extends the Variance, for a period of three years, to September 1, 2013. MADEP issued the Variance Extension in connection with NPDES permits MA0103284, MA0101974, and MA0101982, issued to the MWRA, the City of Somerville, and the City of Cambridge, respectively. This Variance Extension is intended to provide a timeframe for the permittees to implement further the revised recommended CSO control plan for Alewife Brook/Upper Mystic River.

MADEP issued this Variance Extension based on the technical and cost information in the 1997 MWRA CSO Facilities Plan, the July 1, 2003 MWRA Final Variance Report, and affordability analyses demonstrating that it is not feasible at this time for the MWRA, the City of Cambridge and the City of Somerville to fully attain the Class B uses and associated water quality criteria for bacteria for the Alewife Brook/Upper Mystic River as implementation of more stringent CSO controls at this time would result in substantial and widespread social and economic impact as specified in 314 CMR 4.03(4). MWRA and the Cities of Cambridge and Somerville are required to implement the revised recommended CSO control plan included in the July 1, 2003 MWRA Final Variance Report for the Alewife Brook/Upper Mystic River under modifications to the applicable Federal Court Order.

The Variance Extension for CSO Discharges to the Lower Charles River/Charles Basin became effective on October 1, 2010, and extends the Variance for three years, to October 1, 2013. MADEP issued this Variance Extension in connection with NPDES permits MA0103284, MA0101974, and MA 0101192, issued to MWRA, the City of Cambridge, and the Boston Water & Sewer Commission, respectively. This Variance Extension is intended to provide a timeframe for work toward completion of design, construction, and subsequent monitoring of CSO controls proposed in the revised Long Term Control Plan (the "LTCP") and mandated in the relevant Federal Court Orders.

Based on review of the extensive planning documents and reports prepared by the MWRA, the City of Cambridge, and the Boston Water and Sewer Commission, as well as the status of implementation of the LTCP, MADEP has determined that it is not feasible at this time for the MWRA, the City of Cambridge and the Boston Water & Sewer Commission to fully attain the Class B uses and associated water quality criteria for bacteria for the Lower Charles River/Charles Basin as implementation of more stringent controls at this time would result in substantial and widespread economic and social impact.

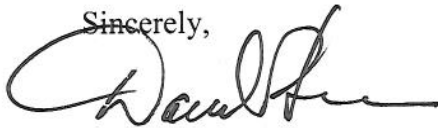
The components of the LTCP for the Lower Charles River/Charles Basin include the recommendations of the *January, 2004, Cottage Farm CSO Facility Assessment Report*, with additional wastewater improvements to further reduce CSO activations and volume at the Cottage Farm facility. Additionally, an abandoned 54-inch sewer crossing beneath the Charles River will be activated in order to convey flow to the Ward Street headworks and the Deer Island Wastewater Treatment Plant. System optimization, outfall closures, and separation in Brookline and the Bulfinch Triangle area of Boston also are elements of the LTCP's proposed improvements for the Lower Charles River/Charles Basin.

MWRA, in cooperation with the City of Cambridge and the Boston Water & Sewer Commission, is required to implement the LTCP. Portions of the work included in the LTCP, specifically the sewer separation work in Boston, Cambridge and Brookline, are critical to achieving a high level of CSO control in the Charles River, and, at the same time, to addressing public health concerns associated with sewer backups and flooding.

It is anticipated that these Variance Extensions will be reflected in the associated NPDES permit renewals for the MWRA, the Cities of Cambridge and Somerville and Boston Water & Sewer Commission. These Variance Extensions are warranted so that based on information collected, analyses performed and work conducted pursuant to their conditions and implementation of the associated CSO control plans, it ultimately can be determined whether Class B uses of the receiving waters can be attained. The Variance Extensions are consistent with EPA Guidance, *Coordinating CSO Long-Term Planning with Water Quality Standard Reviews (July 31, 2001)*, which states that longer term variances and renewal of variances are warranted given the extended duration necessary for implementation of Long Term CSO Control Plans.

Should you have any questions in connection with this matter, please do not hesitate to contact Mark A. Casella, P.E., of the Wastewater Permitting Program, at 617-654-6517.

Sincerely,

A handwritten signature in black ink, appearing to read "David R. Ferris", written over a horizontal line.

David R. Ferris, Director
Bureau of Resource Protection

cc: Marcia Sherman, MADEP/ Boston
Kevin Brander, MADEP/ NERO
Ellen Weitzler, USEPA